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ON

THE POPULATION

AND

MORTALITY OF CALCUTTA:

READ BEFORE THE

STATISTICAL SECTION OF THE BRITISH ASSOCIATION,

AT DUNDEE, THE 9TH SEPTEMBER, 1867;

ALSO BEFORE

THE EAST INDIA ASSOCIATION,

LONDON, THE 11TH FEBRUARY, 1868.

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ON THE POPULATION AND MORTALITY OF CALCUTTA.

By P. M. TAIT, Esq., F.S.S., F.R.G.S. (*late of Calcutta*), *Director of the Indian Business of the Albert Life Assurance Company.*

Read before the Statistical Section of the British Association at Dundee, the 9th September, 1867.

I.—INTRODUCTORY.

Before entering on the purely statistical portion of this paper, let us take a bird's-eye view of Calcutta, as seen from the top of the writer's house in Chowringhee.

It is seven o'clock in the morning, in the month of February —bright sunshine, and a brilliant, clear atmosphere. On every side, far as the eye can reach, the prospect is bounded by the line, where the luxuriant vegetation of Bengal meets the horizon; one vast plain, not even a hillock to break the monotony of the view. To the west, comparatively in the immediate foreground, is the Auchterlony monument, the splendid equestrian statue, by Foley, of Lord Hardinge, and Fort William; and stretching away in the distance, from our gate, for four miles is the extensive plain or *maidaun* terminating in the race-course, and bounded by the Strand or "Course," the Rotten Row of Calcutta, a magnificent promenade, skirting the river through three miles. The river itself, here, is about double the breadth of the Thames at London-bridge, and bears on its bosom a fleet of the largest merchant ships afloat. An agreeable object in this direction is the Baboo's Ghaut, towards which a stream of natives wend their way to perform their matutinal ablutions in

the sacred river; the sun glistens on their white garments. On the right is Government Place, leading to the vice-regal residence, which latter is a very noble structure, and the finest object, architecturally, in the panorama. North, South, and East, lies the City of Calcutta, a conglomeration of flat-roofed houses, relieved here and there, especially towards the East, by patches of foliage, the cocoa-nut, plantain, and palm-trees predominating, and disfigured, I am bound to say in a picturesque point of view, by the spires of the Christian churches. These are evidently of an architecture belonging to a different clime, and are wholly out of keeping with the general character of the landscape. Rising gaunt and ungainly, like sentinels from the mass of buildings around, it requires no vivid imagination to fancy them types of that isolation which is felt by a handful of Europeans worshipping amidst numbers of Asiatics. Away to the South, commencing from where we stand, is the Belgravia of Calcutta, called Chowringhee, where the wealthier of the European inhabitants reside. In the quarter towards the North, are situate the bazaars and merchants' offices, the "City" proper, in fact, of Calcutta—a very fine object just below us being the beautiful Mussulman mosque erected by Prince Gholam Mahommed—while, towards the East, there is a purely oriental prospect, broken only by the Fever Hospital—a stately building, and by one or two Baboo's houses, huge square masses of masonry, in which reside wealthy Hindoos and their families. This eastern quarter is inhabited chiefly by Eurasians, natives, and the humbler class of Europeans. Altogether a very fine panorama for an Oriental City. Around, as these lines are written, sweep myriads of birds, kites, crows, and vultures innumerable, attracted by the meat bazaars below.

Descend into the streets or take a drive into the suburbs, and we at once realise the strict accuracy of Macaulay's famous description; "the strange vegetation of the palm and the cocoa-nut tree, the rice field, the tank, the huge trees—older than the Mogul Empire—under which the village crowds assemble, the

thatched roof of the peasant's hut, the rich tracery of the mosque where the Imaum prays with his face to Mecca, the drums and banners and gaudy idols, ... the graceful maiden with the pitcher on her head descending the steps to the river side, the black faces, the long beards, the yellow streaks of sect, the turbans and the flowing robes, the spears and the silver maces, the elephants with their canopies of state, the gorgeous palanquin of the prince, and the close litter of the noble lady."*[3]

Calcutta, the metropolis of British India, and the "London of the East," is situate on the left bank of the river Hooghly, a branch of the Ganges, and is distant by the river's course about a hundred miles from the sea. The city covers an area of about eight square miles, enclosed between the river and the line of the old entrenchment known as the Mahratta Ditch, and measures four and a half miles from North to South, the average breadth being about one and a half miles.[4]

In 1700 certain villages now occupied by the site of Calcutta, were assigned to the East India Company in recognition of a present made by them to Azim, a son of Aurungzebe, Emperor of Delhi. As the story goes one of those villages was called "Kalcuttah," from "Kali" a goddess, and "Cuttah" a temple; and hence, it is said, the appellation by which this great metropolis is now known.[5]

Beyond the Mahratta Ditch the environs of Calcutta are studded with numerous suburbs, of which the principal are:—

On the North - - -	Chitpore.
	Cossipore.
On the South - - -	Bhowaneepore.
	Allipore.
	Kidderpore.
	Garden Reach.

* Macaulay's Essays.

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Bahar-Simla
Sealdah.
Entally.
Ballygunge.

On the opposite side of the river lie the villages of - Seebpoore. Howrah, and Sulkeah.[6]

The approach to Calcutta by the river is very imposing, particularly after leaving Garden Reach. Passing Fort William on the right, the Town Hall, Government House, the spacious Esplanade, and Chowringhee in the distance, all burst upon the view and form a picture which quite justifies to a stranger the appellation "City of Palaces." The houses in the Chowringhee quarter are generally constructed in the Grecian style of architecture, and ornamented with spacious verandahs. A description of the interior of that from which we took a bird's-eye view of the city, will convey some idea of the whole.

A carriage drive leads to the principal entrance, under a portico. Passing the threshold, we enter a spacious hall floored with marble. There are four rooms on this the ground floor, the *salle à manger*, a very fine apartment also flagged with marble, and quite large enough to accommodate 100 persons at table. Ascending a very easy staircase to the first floor, we reach the principal reception room, a really noble apartment, in which and the adjoining verandahs it would be easy to receive 300 or 400 persons. Contiguous to this apartment is another drawing room, used as a billiard room. On the third floor are the sleeping and bath rooms, the latter usually paved with marble. All the servants' apartments, stabling, kitchens, &c., form a separate range of buildings apart from the house. This, then, is a very moderate house for the accommodation of a small English family of the best class, in the Chowringhee of Calcutta. There is, of course, nothing of the finish or elegance of a house in Belgravia, but everything

is spacious and ample. Here one is not "cabinned, cribbed, confined;" there is room to breathe and move about. The verandahs on the first and third floors of the house we have described, being of an aggregate length of 150 yards, and 4 yards broad throughout, afford every facility for promenade.*[7]

The following paper is derived chiefly from the "Report on the Census of Calcutta for the year 1866," dated Calcutta, the 12th of April of last year, and signed by the Vice-Chairman of the Justices of the Peace for the town of Calcutta.[8]

It appears that attempts at taking a census of Calcutta have been made on several occasions, and the following results are on record:—

When taken.	By whom taken.	Number of Inhabitants.
1756.	Mr. Holwell	409,056.
1800.	Police Committee	500,000.
1814.	Sir E. H. East, Bart.†	700,000.
1821.	Town Assessors	179,917.
1821.	The Magistrates	230,552.
1831.	Captain Steel..	187,081.
1837.	Captain Birch, Supt. of Police ‡ ..	229,714.
1850.	Simms (Survey of Calcutta) ..	353,567.
1866.	Justices of the Peace for Calcutta.	377,924.

A glance at the above table will show that, prior to 1850, the disparities are so great that very little confidence can be placed in the figures, which are therefore wholly valueless for the purposes of comparison.[9]

* Those only who have lived in India can realize the luxury of a lounge in the verandah, in the conventional shirt and pyjamas, at the close of a long day in the height of the hot season. Such has been the intensity of the heat, that the very walls of the houses scorch the cheek in driving past at eventide; but now a cool wind begins to blow from the south, the business of the day is over, the servants wait with ices and cooled drinks, cigars are lit, and some compensation is found in the delicious langour of the hours preceding sleep, for all the *désagrémens* of the past day.

† It is supposed that the suburbs, or a part of them, have been included in this calculation.

‡ Vide Statistical Journal, vol. viii., p. 50. This estimate does not include the "floating population" of Calcutta.

That conclusion will be strengthened by an inspection of the following table, indicating the population as compared with the number of inhabited houses at different periods, and according to different authorities:—

Year.	Authority.	Houses.		Occupants.
		Pucka.*	Huts.	
1831.	Captain Steel	15,303	54,773	187,081.
1837.	Captain Birch	14,623	50,871	229,714.
1850.	Mr. Simms	13,078	48,314	361,369.

Results which would indicate that, as the population of Calcutta increased, the number of inhabited houses diminished![10]

The present census is the only one which was ever taken in Calcutta "under the authority of law," and appears to have been carried out with all the care practicable in the circumstances.[11]

The following are the names of the Committee of the Justices of the Peace for the town of Calcutta appointed to take the census:—

H. V. Schalch, B.C.S.†
A. M. Dowleans,†
Manakjee Rustomjee,‡
Dr. Norman Chevers,†
Moulvie Abdool Luteef Khan Bahadoor, § and
Ramanauth Tagore. ‖[12]

* "Pucka" means literally sound. Here it is used to distinguish the regularly built flat-roofed houses, chiefly inhabited by the Christian population, from the thatched huts of the great bulk of the native residents.

† European. § Mahomedan.
‡ Parsee. ‖ Hindoo.

II.—ARRANGEMENTS FOR TAKING THE CENSUS.

The following special difficulties had to be encountered in taking the census of Calcutta, viz.:—

The impression amongst the humbler natives that the object of the census was the imposition of some new tax.

The large number of natives ignorant of reading and writing.

The variety of languages spoken by the population.

The reticence of the non-European population as to their women.

The agency to be employed without the interference of the police.

The preparation of a form of return best suited to the habits and understanding of the natives.[13]

In order to satisfy the native population that the object of the census was wholly unconnected with any scheme of taxation, Moulvie Abdool Luteef and Baboo Ramanauth Tagore, members of the census committee, drew up an explanatory paper, which was translated into Bengalee, Hindoo, Oordoo, and Nagree, and copies sent to each of the native justices with the view of enlisting his active co-operation in the enterprize. The Moulvie also took great care to distribute the paper in Nagree amongst the Mahommedan residents of the town, and delivered a very excellent lecture on the census at the Bethune Society, which was also translated into several languages and extensively circulated.[14]

Notice of the intended census was also promulgated by tom-tom all over Calcutta, for the special information of such of the natives as could not read or write.

Considering the strong aversion of the humbler class of natives to native policemen, the census committee decided on carrying out the whole operation without the interference,

in any way, of these functionaries. The following number of specially paid enumerators were accordingly employed:—

50	understanding	Persian and Nagree.
60	do.	English and Bengalee.
110	do.	Bengalee and Hindustani.
220	in all.	

These were selected from the localities of which they were to take an account, and were generally personally known to the residents; and each enumerator besides giving satisfactory references as to character and identity, was able to speak and write the language of the locality to which he was attached.[15]

Street lists were prepared from the assessment books of the Justices, and distributed amongst the enumerators, who were required to make the necessary returns, with a view to a completion of the following particulars made up to the date of the census, viz.:—

1. The number of buildings in each street.
2. The number of dwellings, the inmates of which can read and write.
3. The language in which they can read and write.
4. The number of dwellings, the inhabitants of which can neither read nor write.
5. The language which such people generally speak.[16]

The next point was to devise a form of return of the inmates of each dwelling, which, while combining as many statistics as possible, would be likely from its simplicity to secure the friendly co-operation of the inhabitants. The classification of nationality was felt to be a difficulty, there being a clear line of demarcation in India, between Christians of pure European parentage and those of mixed European and Asiatic parentage, and considerable irritation likely to arise among the latter class, should minute information be required on that point.

A schedule embracing the following particulars was adopted, viz.:—

Name of male inhabitants above 10 years of age.	Members of family, servants, visitors, & others.
Country and place of birth.	
Age.	
Race or caste.	
Occupation.	
Children under 10 years of age.	Male. Female.
Female inhabitants above 10 years of age.	Members of family, servants, visitors, & others.

To facilitate the filling up of these returns, an example of a form filled up was attached to each blank return.[17]

The following special instructions were framed for the guidance of the enumerators:—

1. Street Books.—A list or book to be prepared for each street separately, containing the number and description of each building, tenement, hut, &c., contained within the said street. This list will be prepared from the assessment books, of which, in fact, it will be a copy, with the omission of the owner's name and the value of the property.

2. The enumerator will proceed with such a list through the street to which it refers, and call at each tenement to ascertain the following particulars:—

(*a*) Whether any additions have been made to the tenement beyond what is described in the list.

(*b*) Whether inhabited or not.

(*c*) Whether any of the inmates can read and write, and in what language.

(*d*) The number of huts comprised in tenanted land, entered in the assessment book as under one number only.

(*e*) Any new building that may have been erected, and which is not entered in the assessment books with the above details.

3. There will be no occasion to enter all the above particulars in the list, because one single entry will in most cases explain the others. For instance, if a house be uninhabited, it will be quite enough to record the word "empty," as such will show that there is no one living in it, and consequently no one to read and write.

4. Where a tenement is inhabited, and some one of the inmates can read and write, it will be quite sufficient to record only the language in which he can read and write, for instance, B., "Bengalee;" P., "Persian;" O., "Ordoo."

5. Where occupiers of tenements cannot read or write, the enumerator, after ascertaining what language the inmates speak, will record in his list, "cannot read Bengallee," or "Ordoo," or whatever the language of the people may be.

6. Where a house is uninhabited, but a Durwan* or some other servants in charge, the record in the enumerator's list will be Durwan only, or "two bearers,"† or whatever the case may be; and he will, on the day fixed for taking the census, fill in the particulars of age, &c., as required by the return.

7. If there be any alteration, that is, either addition to or reduction of a building, the record will simply be "second storey added," or "upper storey pulled down," or whatever the case may be. Form A shews in red ink the different entries as required.

* Gatekeeper. † Male indoor servants, usually Hindoos.

8. Preparation of Returns.—Each enumerator will send to the office such of the street lists as have been filled up by him, according to the above rules, on the previous day. The writers at the office will then prepare the blank returns for each of the houses, the inmates of which can read and write and in the language noted. These returns will bear on the outside the number of the premises, and be made up in bundles for each street separately. These bundles will afterwards be returned to the enumerator, who, on repassing through the same street, will leave the blank returns at the premises indicated on the back of the return with a request that the same may be filled up according to the specimen form attached thereto.

9. The writers at the office will prepare for each street another bundle, containing blank returns for such premises the inmates of which can neither read nor write. Each return will be in the language of the people, and bear outside the number of the tenement, hut, &c., to which it refers.

10. These bundles will be made over to the enumerator, who, on the day appointed for taking the census, will proceed to each of the premises to which the return refers, and fill up the required details.

11. These returns, duly filled up, will be handed over to the writers at the office on the following day, and the enumerators will then proceed to collect the blank returns which have been left with people who can read and write to be filled up.

12. When all the returns have been collected they will be handed to the writers at the office, who will therefrom compile such tables of the whole population of the town as may be required hereafter, and con-

taining all the details given in the returns, but in the aggregate number.

13. To the tables mentioned in paragraph 12 will be added the returns of the floating population of the port, as well as of the residents of Fort William and of Coolie Bazaar, for the census of which special arrangements will be made in accordance with the foregoing rules.[18]

It now became necessary to make arrangements for enumerating the following, viz:—

Residents in Fort William.
Residents in Coolie Bazaar.
Floating population of the Port.
Vagrant and houseless persons.
Inmates of the Jail and House of Correction.

And under sanction of the Government, the schedules were issued to the proper authorities. The census was applied, through the Master Attendant, to ships lying between Hastings Bridge and the Chitpore Canal gate, to the north of the town; but included all vessels, whether moored on the Calcutta or Howrah side of the river. As to the population on board of the native craft, and vagrants, they were enumerated under special arrangements made with the Inspectors of Police.[19]

The enumerators began to take the census at seven o'clock on the night of the 8th of January, 1866, and completed their task by two o'clock in the morning of the following day. It appears that no less than 149 houses were locked up and deserted on the night of the census; and on visiting them later, it was found by the enumerators that, in 98 cases, the inmates had actually fled to avoid the census, but had returned on the following morning.

The enumerators made a second round to verify all the returns; and by the 18th of February, these were in a sufficiently complete state to enable the facts to be tabulated. [20]

III.—AREA AND CONTENTS OF CALCUTTA.

By section 2 of Act VI. of 1863, the town includes all places within the local limits of the ordinary original civil jurisdiction of Her Majesty's High Court of Judicature, at Fort William, in Bengal. It is bounded on the north, by a line a little to the south of the Chitpore canal; on the east, by the Circular road; on the west, partly by the river Hooghly; and on the south, by the Mahratta ditch, and Tolly's Nullah canal; and occupies an area of 15,115 biggahs,* 8 cottahs, 10 chittacks, and 27 feet: equal to 7·80755843 miles, which, however, includes Fort William, the Maidan, with its enclosures, Coolie Bazaar, and Tolly's Nullah, west of Alipore Bridge.† [21]

The following are the particulars of the area of Calcutta, as obtained from page 30 of the Census Report, but converted into English square miles, viz:— [22]

LOCALITY.	Square Miles.
Within the limits of Her Majesty's High Court ...	7 808
Within the jurisdiction of the Justices	5·657
Northern Division of the Town	3·517
Southern do. do.	2·141
Fort William	0·269
Coolie Bazaar	0·127
Buildings and Compounds ‡	4·658
Places of Public Worship	0·045
Tanks and Public Enclosures	0·284
Public Roads and Lanes	0·772
Burial Grounds	0·017

* A biggah is equal to 20 cottahs, and one cottah, or 16 chittacks,=720 square feet.

† Census Report, page 12.

‡ The enclosed open space around houses in India; supposed to be derived from the Portuguese "campinho," a field.

The following are the particulars of streets and houses, viz:—

Number of streets and lanes			438
Aggregate length thereof			570,778 feet.
Length in miles...			108 miles 32 poles 13 feet.
Average width			38·212 feet.
Number of pucka buildings—			
Northern Division	11,708	}	15,975
Southern Division	4,267	}	
Number of huts—			
Northern Division	31,120	}	42,917
Southern Division	11,797	}	
Average space occupied by buildings—			
Northern Division			207 yards 6 feet.
Southern Division			324 yards 2 feet.[23]

The houses consist of—

1	of five stories	
26	„ four	„
999	„ three	„
7,677	„ two	„
7,277	„ one	„
42,917	huts.	

58,892 tenements in all, distributed as follows:—[24]

Tenements.	Southern Division.	Northern Division.
Five Stories	...	1
Four „	4	22
Three „	235	764
Two „	1,900	5,777
One „	2,128	5,144
Huts	11,797	31,120
Totals ...	16,064	42,828

There were, on the night of the census, lying between

Hastings Bridge to the south, and the Chitpore Canal gate to the north, which are the boundaries of the jurisdiction of the Municipal Corporation, 112 European sailing vessels and 20 steamers, tugs, and flats, aggregating 118,256 tons burthen. There were also of native craft, which includes all vessels in command of natives or bearing native flags, 37 in port, aggregating 25,021 tons burthen, and 2,140 dinghees, bhurs, and other descriptions of river boats.[25]

VI.—POPULATION.

The following was the population of Calcutta on the evening of the 8th of January, 1866, viz:—

Europeans	11,224
Eurasians	11,036
Greeks	30
Armenians	703
Asiatics	1,441
Jews	681
Parsees	98
Africans	53
Chinese	409
Mussulmans	113,059
Hindoos	239,190
Grand total ...	377,924[26]

Under "Europeans" are included all those born in Europe, or of pure European parentage; also Americans, of whom there is a considerable number in Calcutta. "Eurasians" are persons of mixed European and Asiatic parentage, a large proportion being, no doubt, Indo-Portuguese. Of the "Greeks," those born

in Europe we are informed have been included amongst the Europeans. The "Armenians" are, I apprehend, chiefly descendants of colonists from Armenia, in Western Asia, a country which includes the source and basin of the Upper Euphrates. Although very limited in number, they are a highly respectable body, and several eminent merchants belong to this class. The Armenian Church of St. Nazareth, in Calcutta, was erected so far back as 1724. I am at a loss to understand what class is specially included under "Asiatics," seeing that with the exception of the Europeans, nearly the whole population is Asiatic. Possibly Persians, or Arabs of "low castes," not coming under any particular nationality, are meant. The Jews, although limited in number, appear to possess two Synagogues in Calcutta. Attached to one of these places of worship, I observe, by the Calcutta Directory for 1867, there is an officer styled "Hebrew, wise and learned, with power to grant divorces." The Parsees are a highly enterprising and respectable class; their head-quarters being Bombay. They are the descendants of the original Ghebers, or Persians of the old religion, who fled* to India from their Moslem conquerors; they possess two places of worship in Calcutta, one styled "The Temple of the Sacred Fire," the other "The Temple of Silence." The "Africans" are, I apprehend, chiefly Arabs, but according to Captain Birch's Census of Calcutta, in 1837, there were then 351 Arab residents, while in 1866 the total number of "African" residents is returned at 53! The "Chinese" are almost entirely of humble rank, the great majority of them being shoemakers. As might have been expected, out of a

* Thus in Lallah Rookh:

"Oh! I would rather houseless roam,
* * *. * * &c., &c.

And again where Hafed informs Hinda:—

"* * * I am of that impious race,
Those slaves of fire * * *"
And so on.

population of 377,924, no less than 352,249, or upwards of 93 per cent., are natives. [27]

The following is the estimated population of the suburbs*:—

Chitpore Cossipore	}	...	60,000
Bhowanipore		...	15,000
Allipore ...		...	20,000
Kidderpore		...	15,000
Garden Reach		...	10,000
Nunderbagh		...	5,000
Bahar-Simla Sealdah Entally	}	...	50,000
Ballygunge		...	10,000
Seebpore ...		...	5,000
Howrah ...		...	50,000
Sulkeah ...		...	10,000
	Total	...	250,000

Thus, the grand total of the population of Calcutta and the suburbs, is certainly not under 627,924.[28]

It is to be observed, that a large number of persons, chiefly natives, who have fixed occupations in the town, reside in the suburbs. The census committee estimate that at least 20,000 arrive every morning by rail and dinghee alone, from the direction of Howrah; and that other places in the suburbs contribute at least 30,000, making 50,000 in all, which constitutes the daily floating population of the town.[29]

The following is a summary of the male and female population of Calcutta, according to nationalities and ages, which is extracted from the Census Report verbatim.

* These figures have been very courteously furnished to me by the Vice-Chairman of the Justices, who points out, that, as the collector of the 24 Pergunnahs, as well as the Municipal Committee of the suburbs, and of Howrah, have regular assessment books, there ought to be no difficulty in arriving at an approximate estimate of the population of the suburbs.

Summary of the Male and Female Population of Calcutta, according to Nationalities and Ages.

		The Town of Calcutta.		Fort William.	Coolie Bazaar.	European Shipping.	Native Crafts.	The Presidency Jail.	Total.	Total of each Nationality.
		N. D	S. D.							
EUROPEANS.	Males—From 10 to 15 years of age	61	126	17	8	38	..	1	251	11224
	Males—„ 16 to 20 „	46	176	34	5	366	1	15	643	
	Males—„ 21 to 25 „	102	446	341	7	527	2	37	1442	
	Males—„ 26 to 30 „	130	465	802	17	471	4	46	1935	
	Males—„ 31 to 35 „	75	350	271	17	216	1	18	948	
	Males—„ 36 to 40 „	72	283	168	16	179	3	9	730	
	Males—„ 41 to 45 „	36	200	41	5	94	..	4	380	
	Males—„ 46 to 50 „	40	105	7	8	61	..	3	224	
	Males—„ 51 to 55 „	23	70	2	1	29	..	4	129	
	Males—„ 56 to 60 „	14	40	3	2	11	..	..	70	
	Males—„ 61 to 65 „	8	25	1	..	4	..	..	38	
	Males—„ 66 to 70, and upwards	2	25	..	2	..	..	1	30	
	Females—Above 10 years	296	1952	167	88	28	4	10	2545	
	Boys—Under 10 years	124	606	97	55	21	..	4	907	
	Girls—Under 10 years	131	681	81	50	7	1	1	952	
INDO-EUROPEANS.	Males—From 10 to 15 years of age	188	416	..	11	..	..	1	616	11036
	Males—„ 16 to 20 „	200	386	3	4	5	1	2	601	
	Males—„ 21 to 25 „	153	339	..	5	13	1	6	517	
	Males—„ 26 to 30 „	220	347	1	2	9	..	2	581	
	Males—„ 31 to 35 „	183	212	1	3	8	1	..	408	
	Males—„ 36 to 40 „	155	261	1	5	4	..	2	428	
	Males—„ 41 to 45 „	152	172	..	3	..	..	..	327	
	Males—„ 46 to 50 „	97	131	1	1	..	..	..	230	
	Males—„ 51 to 55 „	39	83	1	2	..	..	1	126	
	Males—„ 56 to 60 „	35	74	..	2	..	1	..	112	
	Males—„ 61 to 65 „	8	43	..	3	..	..	..	54	
	Males—„ 66 to 70, and upwards	29	52	..	1	..	..	..	82	
	Females—Above 10 years	1361	2814	9	33	1	..	..	4218	
	Boys—Under 10 years	439	872	1	12	..	..	..	1324	
	Girls—Under 10 years	500	894	..	18	..	..	..	1412	

Summary of the Male and Female Population of Calcutta, according to Nationalities and Ages.

		The Town of Calcutta.		Fort William.	Coolie Bazaar.	European Shipping.	Native Crafts.	The Presidency Jail.	Total.	Total of each Nationality.
		N. D.	S. D.							
GREEKS.	Males—From 10 to 15 years of age	...	1	...	...	...	...	...	1	30
	„ 16 to 20 „	1	2	...	...	...	...	...	3	
	„ 21 to 25 „	1	...	...	...	...	...	...	1	
	„ 26 to 30 „	1	2	...	...	...	...	...	3	
	„ 31 to 35 „	1	1	...	...	...	...	...	2	
	„ 36 to 40 „	1	1	...	...	...	...	...	2	
	„ 41 to 45 „	1	...	...	...	...	...	...	1	
	„ 46 to 50 „	1	1	...	...	...	...	...	2	
	„ 51 to 55 „	...	...	...	...	...	...	...	...	
	„ 56 to 60 „	...	...	...	...	...	...	...	...	
	„ 61 to 65 „	1	...	...	...	...	...	...	1	
	„ 66 to 70, and upwards	1	...	...	...	...	...	...	1	
	Females—Above 10 years	2	5	...	...	...	...	...	7	
	Boys—Under 10 years	2	...	...	...	...	...	...	2	
	Girls—Under 10 years	1	3	...	...	...	...	...	4	
ARMENIANS.	Males—From 10 to 15 years of age	26	31	...	...	...	...	...	57	703
	„ 16 to 20 „	17	17	...	...	...	...	...	34	
	„ 21 to 25 „	24	14	...	...	...	...	...	38	
	„ 26 to 30 „	19	14	..	...	...	...	...	33	
	„ 31 to 35 „	15	15	...	..	...	...	...	30	
	„ 36 to 40 „	10	8	...	...	...	...	...	18	
	„ 41 to 45 „	14	9	...	...	...	...	...	23	
	„ 46 to 50 „	9	6	...	...	...	...	...	15	
	„ 51 to 55 „	5	3	...	...	...	...	...	8	
	„ 56 to 60 „	9	5	...	...	...	...	...	14	
	„ 61 to 65 „	6	3	...	...	...	...	...	9	
	„ 66 to 70, and upwards	9	3	...	...	...	...	...	12	
	Females—Above 10 years	107	131	...	...	...	...	...	238	
	Boys—Under 10 years	40	48	...	...	...	...	...	88	
	Girls—Under 10 years	43	43	...	...	...	...	...	86	

27249

Summary of the Male and Female Population of Calcutta, according to Nationalities and Ages.

		The Town of Calcutta.		Fort William.	Coolie Bazaar.	European Shipping.	Native Crafts.	The Presidency Jail.	Total.	Total of each Nationality.
		N. D.	S. D.							
ASIATICS.	Males—From 10 to 15 years of age	24	34	..	..	3	1	..	62	1441
	Males—„ 16 to 20 „	47	67	4	..	11	..	..	129	
	Males—„ 21 to 25 „	52	74	..	..	14	..	1	141	
	Males—„ 26 to 30 „	41	66	..	..	12	3	2	124	
	Males—„ 31 to 35 „	28	47	1	..	3	1	1	81	
	Males—„ 36 to 40 „	30	58	1	1	3	.	1	94	
	Males—„ 41 to 45 „	25	27	2	..	2	..	..	56	
	Males—„ 46 to 50 „	16	31	1	..	2	..	..	50	
	Males—„ 51 to 55 „	4	9	..	..	..	..	..	13	
	Males—„ 56 to 60 „	8	11	2	..	..	..	..	21	
	Males—„ 61 to 65 „	2	2	1	..	..	..	..	5	
	Males—„ 66 to 70, and upwards	6	3	..	..	..	..	1	10	
	Females—Above 10 years	209	196	4	..	3	..	..	412	
	Boys—Under 10 years	69	51	..	..	..	..	..	120	
	Girls—Under 10 years	77	46	..	..	..	..	..	123	
JEWS.	Males—From 10 to 15 years of age	19	..	..	..	..	..	..	19	681
	Males—„ 16 to 20 „	30	..	..	..	..	..	..	30	
	Males—„ 21 to 25 „	33	..	..	..	..	..	..	33	
	Males—„ 26 to 30 „	40	..	..	..	..	..	..	40	
	Males—„ 31 to 35 „	22	..	..	..	..	..	..	22	
	Males—„ 36 to 40 „	29	..	..	..	..	..	..	29	
	Males—„ 41 to 45 „	14	..	..	..	..	..	..	14	
	Males—„ 46 to 50 „	13	..	..	..	..	..	..	13	
	Males—„ 51 to 55 „	14	..	..	..	..	..	..	14	
	Males—„ 56 to 60 „	13	..	..	..	..	..	..	13	
	Males—„ 61 to 65 „	4	..	..	..	..	..	..	4	
	Males—„ 66 to 70, and upwards	9	..	..	..	..	..	..	9	
	Females—Above 10 years	228	..	..	..	..	..	..	228	
	Boys—Under 10 years	111	..	..	..	..	..	..	111	
	Girls—Under 10 years	102	..	..	..	..	..	..	102	

Summary of the Male and Female Population of Calcutta, according to Nationalities and Ages.

		The Town of Calcutta.		Fort William.	Coolie Bazaar.	European Shipping.	Native Crafts.	The Presidency Jail.	Total.	Total of each Nationality.
		N. D.	S. D.							
MUSSULMANS.	Males—From 10 to 15 years of age	1611	1498	19	25	20	206	7	3386	113059
	„ 16 to 20 „	3603	3190	49	60	126	1201	24	8253	
	„ 21 to 25 „	5105	4613	78	87	169	1766	31	11849	
	„ 26 to 30 „	6117	5118	58	89	160	1880	68	13490	
	„ 31 to 35 „	3534	2902	34	58	89	814	17	7448	
	„ 36 to 40 „	4887	3548	34	74	48	1027	16	9634	
	„ 41 to 45 „	1804	1425	8	39	36	225	8	3515	
	„ 46 to 50 „	1868	1551	17	42	25	266	8	3777	
	„ 51 to 55 „	546	505	11	13	10	52	1	1138	
	„ 56 to 60 „	872	851	8	25	11	92	...	1859	
	„ 61 to 65 „	247	189	3	6	1	12	...	458	
	„ 66 to 70, and upwards	459	456	2	18	2	38	...	975	
	Females—Above 10 years	14273	13883	43	438	1	96	4	28738	
	Boys—Under 10 years	4766	4712	5	132	...	52	...	9667	
	Girls—Under 10 years	4369	4342	5	115	2	9	...	8842	
PARSEES.	Males—From 10 to 15 years of age	6	...	...	...	...	...	...	6	98
	„ 16 to 20 „	2	...	...	...	...	...	...	2	
	„ 21 to 25 „	10	1	...	...	...	...	...	11	
	„ 26 to 30 „	17	1	...	...	...	...	...	18	
	„ 31 to 35 „	10	2	...	...	...	...	...	12	
	„ 35 to 40 „	5	...	...	...	...	...	...	5	
	„ 41 to 45 „	7	...	...	...	...	...	...	7	
	„ 46 to 50 „	5	2	...	...	...	...	...	7	
	„ 51 to 55 „	3	...	...	...	...	...	...	3	
	„ 56 to 60 „	...	...	...	..	...	...	...	...	
	„ 61 to 65 „	1	...	...	...	...	...	...	1	
	„ 66 to 70, and upwards	1	...	...	...	...	...	...	1	
	Females—Above 10 years	15	...	...	...	...	...	...	15	
	Boys—Under 10 years	5	1	...	...	...	...	...	6	
	Girls—Under 10 years	4	...	...	...	...	...	...	4	

Summary of the Male and Female Population of Calcutta, according to Nationalities and Ages.

		The Town of Calcutta.		Fort William.	Coolie Bazaar.	European Shipping.	Native Crafts.	The Presidency Jail.	Total.	Total of each Nationality.
		N. D.	S. D.							
HINDOOS.	Males—From 10 to 15 years of age	5239	1459	30	30	3	174	5	6940	239190
	„ 16 to 20 „	9682	3474	150	87	4	756	20	14173	
	„ 21 to 25 „	13468	4917	276	170	9	998	39	19877	
	„ 26 to 30 „	14454	5526	393	192	6	958	68	21597	
	„ 31 to 35 „	10706	3446	157	93	3	557	12	14974	
	„ 36 to 40 „	12282	4030	121	150	1	689	15	17288	
	„ 41 to 45 „	6196	1649	41	39	1	137	12	8075	
	„ 46 to 50 „	5568	1712	22	46	1	244	6	7599	
	„ 51 to 55 „	2463	575	8	13	1	31	6	3097	
	„ 56 to 60 „	2274	755	7	37	..	83	3	3159	
	„ 61 to 65 „	923	238	4	12	..	6	1	1184	
	„ 66 to 70, and upwards	1160	364	2	17	..	32	1	1576	
	Females—Above 10 years	63934	14371	130	451	..	14	1	78901	
	Boys—Under 10 years	16507	4256	56	172	..	19	..	21010	
	Girls—Under 10 years	15955	3623	41	121	..	..	..	19740	
AFRICANS.	Males—From 10 to 15 years of age	..	..	..	..	..	..	..	..	53
	„ 16 to 20 „	..	..	..	..	2	..	..	2	
	„ 21 to 25 „	2	..	..	..	3	..	1	6	
	„ 26 to 30 „	4	2	..	..	1	..	..	7	
	„ 31 to 35 „	1	3	..	..	4	..	..	8	
	„ 36 to 40 „	1	3	..	..	3	..	..	7	
	„ 41 to 45 „	..	1	..	..	..	..	..	1	
	„ 46 to 50 „	2	2	..	..	1	..	..	5	
	„ 51 to 55 „	1	1	..	..	..	..	..	2	
	„ 56 to 60 „	..	..	..	..	..	..	..	..	
	„ 61 to 65 „	..	..	..	..	..	..	..	..	
	„ 66 to 70, and upwards	..	1	..	..	..	..	..	1	
	Females—Above 10 years	2	7	..	..	..	..	..	9	
	Boys—Under 10 years	1	1	..	..	..	..	..	2	
	Girls—Under 10 years	..	3	..	..	..	..	..	3	

Summary of the Male and Female Population of Calcutta, according to Nationalities and Ages.

		The Town of Calcutta.		Fort William.	Coolie Bazaar.	European Shipping.	Native Crafts.	The Presidency Jail.	Total.	Total of each Nationality.
		N. D.	S. D.							
CHINESE.	Males—From 10 to 15 years of age	3	7	..	..	..	..	..	10	409
	Males—„ 16 to 20 „	10	14	..	..	3	..	..	27	
	Males—„ 21 to 25 „	20	18	..	..	24	1	..	63	
	Males—„ 26 to 30 „	40	32	..	..	7	..	1	80	
	Males—„ 31 to 35 „	30	27	..	..	2	..	1	60	
	Males—„ 36 to 40 „	34	19	..	..	..	..	1	54	
	Males—„ 41 to 45 „	18	11	..	..	..	..	..	29	
	Males—„ 46 to 50 „	19	12	..	..	..	..	..	31	
	Males—„ 51 to 55 „	4	4	..	..	..	..	..	8	
	Males—„ 56 to 60 „	6	1	..	..	..	..	..	7	
	Males—„ 61 to 65 „	3	2	..	..	..	..	..	5	
	Males—„ 66 to 70, and upwards	3	1	..	..	..	..	..	4	
	Females—Above 10 years	..	..	..	..	..	..	..	..	
	Boys—Under 10 years	18	13	..	..	..	..	..	31	
	Girls—Under 10 years	..	..	..	..	..	..	..	..	
TOTAL.	Males—From 10 to 15 years of age	7177	3572	66	74	64	381	14	11348	
	Males—„ 16 to 20 „	13638	7326	240	156	517	1959	61	23897	
	Males—„ 21 to 25 „	18970	10402	695	269	759	2768	115	33978	
	Males—„ 26 to 30 „	21083	11573	1255	300	666	2845	187	37909	
	Males—„ 31 to 35 „	14605	7005	464	171	325	1374	49	23993	
	Males—„ 36 to 40 „	17506	8211	326	246	238	1719	44	28290	
	Males—„ 41 to 45 „	8267	3494	91	86	133	362	24	12457	
	Males—„ 46 to 50 „	7638	3553	47	97	90	510	17	11952	
	Males—„ 51 to 55 „	3102	1250	22	29	40	83	12	4538	
	Males—„ 56 to 60 „	3231	1737	20	66	22	176	3	5255	
	Males—„ 61 to 65 „	1203	502	9	21	5	18	1	1759	
	Males—„ 66 to 70, and upwards	1679	905	4	38	2	70	3	2701	
	Females—Above 10 years	80427	33359	353	1010	33	114	15	115311	
	Boys—Under 10 years	22082	10560	159	371	21	71	4	33268	
	Girls—Under 10 years	21182	9635	127	304	9	10	1	31579	
GRAND TOTAL.—Males		140181	70090	3398	1924	2882	12336	534	231345	377924
Females		101609	42994	480	1314	42	124	16	146579	

The first thing that strikes the eye on glancing over the above table, is the singular disproportion of the sexes. This is most extraordinary, in the Chinese, with reference to which class, there are no females apparently, either children or adults, against the 378 men and 31 boys, enumerated. The explanation given in the Report, is, that the Chinese are usually, if not always married to Christian females, and these have been included under "Eurasians."[30]

The following is the proportion of males, to every 100 females, as applicable to each class, or nationality; computed to the nearest unit, viz.:—

Europeans	221
Eurasians	96
Greeks	173
Armenians	117
Asiatics	169
Jews	106
Parsees	416
Mussulmans	201
Hindoos	142

The general result indicating an average of 157·83 males to 100 females, while in England and Wales in 1861, the proportion of the sexes was nearly equal.[31]

The same anomaly apparently existed in 1837, as the result of the census taken by Captain Birch Colonel Sykes, in his paper on the subject,* declares that the census of Calcutta, taken in 1837, is not at all in accordance with that taken by him in the Deccan, which included 3½ millions of souls, and in which the proportion of females appeared to approximate nearly to what obtains in Europe. Turning for a moment to the return† of the population of Madras, and Bombay, we find the following to be the result as compared with Calcutta, viz.:—

* Statis. Journal, vol. viii. p. 51. † Blue Book.

TOWNS.	Males.	Females.	Proportion of females per cent.	Children.	TOTAL.
Calcutta: Census taken as above	198,077	115,311	58·21	64,536	377,924
Madras: Administration Report, 1862-3	134,302	165,307	123·09	128,162	427,771
Bombay: Census taken 1st February, 1864 ...	436,305	207,285	47·51	172,972	816,562

Thus, at Madras there are 23 per cent. more women than men, but at Calcutta and Bombay about double the number of men that there are women.[32]

Confining the comparison to Mussulmans and Hindoos, which comprise the great bulk of the population of the three Presidency Towns, we have the following results, viz. :—[33]

TOWNS.	Mussulman Adults.		Proportion of Females per cent.	Hindoo Adults.		Proportion of Females per cent.
	Males.	Females.		Males.	Females.	
Calcutta, 1837* ...	38,934	19,810	50·88	85,145	52,506	61·78
Calcutta, 1866 ...	65,812	28,738	43·67	119,539	78,901	66·00
Madras	18,998	24,014	126·40	103,793	127,643	122·98
Bombay	74,754	38,787	51·89	285,172	131.386	46·07

It is to be observed that of the married christian male residents in India, excepting perhaps Eurasians, a very considerable proportion are living in a state of temporary single blessedness, their wives being absent on account of ill-health or engaged in superintending the education of the children at home. This applies also to members of other nationalities with whom India is not a permanent place of residence, and will, to a certain extent, account for the disparity of the sexes in these cases. Having this fact in recollection, and making every allowance also for the extreme reserve of Mahomedans and

* This does not include "Low Castes" separately enumerated in 1837.

the higher caste Hindoos, in all enquiries as to the number of the female inmates of their dwellings, it is nevertheless clear that an abnormal disparity exists in the proportion of the sexes, as revealed by the present census, and that the matter calls for further enquiry and investigation.*

Touching the returns for Madras, I am wholly at a loss to explain how the females exceed the males in number, a result so different from what has been arrived at in the other Presidency Towns. The census for Madras only recognizes four classes, viz.:—

Europeans and Indo-Europeans.
Native Christians.
Hindoos.
Mussulmans.

but the females are in excess of the males in every instance.[34]

The following Table exhibits the proportion per cent. of children of both sexes under each nationality to the adult population of the nationality to which the children belong, viz:—

* The boys born in England are in the proportion of 104,811 boys to 100,000 girls, but they experience a higher rate of mortality, and the numbers are reduced in the end very nearly to an equilibrium, the men and women living, of all ages, being in the proportion of 100,029 to 100,000. At the census of 1861, there were 10,289,965 females and 9,770,259 males enumerated. Making allowance for those women whose husbands were abroad, and for men in the army, navy, and merchant service abroad, there was still an excess of 351,433 women at home, the men of the corresponding ages being on the Continent, in the Colonies, or in foreign lands. The proportion of males to every 100 females in England and Wales since 1821 was as follows:—

1821	..	97.932
1831	..	97.204
1841	..	97.076
1851	..	97.391
1861	..	96.585

The excess of the emigration of males over females is the principal reason for the difference in the proportion of the sexes. Census Report, 1861, pp. 6 and 88.

Nationality or Class.	Male Children per cent.	Female Children per cent.
Europeans	9·69	10·17
Eurasians	15·95	17·01
Greeks	8·33	16·67
Armenians	16·64	16·26
Asiatics	10·02	10·27
Jews	23·72	21·79
Parsees	6·82	4·55
Africans	4·17	6·25
Chinese	8·20	—
Mussulmans	10·22	9·35
Hindoos	10·59	9·95

giving a proportion per cent. of 10.61 male children and 9.97 female children, or a general proportion of 20.58 children to the entire adult population.[35]

I was much startled at the returns of the convicts in the Calcutta Jail on the evening of the census, the ratio of European inmates being out of all proportion in excess of that belonging to other nationalities.

The following are the figures as applicable to every 100,000 individuals belonging to each nationality, viz. :—

Europeans	1,320
Eurasians	130
Asiatics	420
Mussulmans	130
Hindoos	70
Total	2,070

Turning to the report of the census of England and Wales for 1861, I found that the ratio to all classes of the population, of persons detained in convict establishments, jails, reformatories, &c., was 1 in 769, and in 1851, 1 in 754; that is, from 130 to 133 persons for every 100,000 of the population.*

The Calcutta Census Report gives no explanation of these extraordinary figures, and I began to conclude that the European sailors, who are in great force in Calcutta during the month of January, and are notoriously a somewhat unruly class, must have inordinately swelled the criminal returns for that month; and

* Census Report, 1861, p. 11.

that on the other hand the "mild Hindoo," who is practically a vegetarian, abstaining as a rule from intoxicating liquors and living chiefly on rice and fish, is beyond all comparison the least criminal of the population.

On a reference to Calcutta the mystery was solved, and the disparity thus accounted for. It appears that the return does not include all the prisoners in the Allipore and Howrah jails, which are out of the jurisdiction of the town, and contain almost entirely native culprits; whereas Europeans from almost every part of Bengal are sent to the presidency jail of Calcutta. The proportion, therefore, I was informed applied to the total number of Europeans all over Bengal, and not to that of Calcutta alone.

The incident is only another illustration of the extreme necessity for caution in generalising even from statements, admitting apparently of only one interpretation.[36]

It is to be observed that among the lower classes of natives, hardly one in ten is able to state his actual age, and hence we are warned in the report that implicit reliance cannot be placed on the tables exhibiting the different ages of the population. In many cases indeed, the enumerators had to record such an age applicable to the person enumerated, as from enquiries and other evidence appeared to be near the truth. Some of the returns exhibited almost incredible ages, and hence minute enquiries had to be made on this point. The result is given in the following table, shewing the number of persons above 70 years of age:—

	From 71 to 75.	From 76 to 80.	From 81 to 85.	From 86 to 90.	From 91 to 95.	From 96 to 100.	From 101 to 105	Of the age of 116 years	Total.
Europeans ...	3	4	1	1	...	...	...	...	9
Indo-Europeans	20	14	3	3	...	2	1	...	43
Armenians ...	4	2	1	...	...	...	...	...	7
Jews	...	2	1	1	...	...	...	...	4
Mussulmans ...	85	224	31	35	8	5	...	...	388
Hindoos	256	157	55	37	20	3	1	1	530
Total ...	368	403	92	77	28	10	2	1	981

It thus appears that the highest age recorded, applicable to each class, was as follows:—

Europeans	87
Eurasians	104
Armenians	84
Jews	88
Mussulmans	100
Hindoos	116

Resident, therefore, in Calcutta last year, there was one Hindoo old enough to recollect the awful tragedy of the Black Hole, who must have lived through the administration of every Governor-General of India from the time of Clive to that of Sir John Lawrence; who may have seen the author of the "Letters of Junius" carried bleeding from the field after his duel with Warren Hastings, and heard the cry from 100,000 Hindoos which ascended to Heaven when the Maharajah Nuncomar was hanged on the maidan![37]

An attempt was made to classify the population of the town according to occupations, but this we are informed was found to be impracticable. A return was made, however, of the number of establishments licensed to retail spirituous liquors and intoxicating drugs. These are—

Liquor shops	104
Shops for the sale of preparations used in smoking ...	55
Hotels	31
Boarding establishments ...	15
Other places	25
	230

Which, taking the fixed and floating population at 430,000, is in the proportion of one licensed shop to each 1,870 persons.[38]

Reverting to paragraph 21, which gives the area of Calcutta, and to paragraph 26, which gives the gross population,

it would appear that the mean density of Calcutta is expressed by 48,405 persons to the square mile or 75·63 persons to the acre. The mean town density of England and Wales is expressed by 3,665 persons to the square mile, or 5·73 persons to an acre.[39]*

V.—MORTALITY.

Under two local acts of the Bengal Government, Calcutta has been divided into six districts, a registrar being appointed to each, and registration of births and deaths rendered compulsory on all persons residing within the boundaries of the town, under penalty of a fine, not exceeding Rs. 100, on persons who shall refuse or neglect to register within eight days after the occurrence of each birth or death.† It appears, however, from the Health Officer's Report,‡ that the fines levied for non-compliance with the acts are merely nominal, for during 1865, there were 81 convictions, while the aggregate fines amounted to Rs. 134·12, or Rs. 1·10·7, that is about 3s. 4d. sterling each fine.[40]

It is quite evident, indeed, from the figures, that the returns must be defective. Thus we find that for the period under notice, the deaths are returned at 23,233, and the births at 4,913, a result, which of course, would indicate that the total extinction of the population of the town was only a question of time.[41]

The Health Officer has classified the mortality per cent. according to *Creeds*, under Christians, being included, I apprehend,

* Census Report, 1861, p. 10; but comparing Calcutta with an English town of about the same size, as Manchester for instance, we find, according to M'Culloch, that the latter contains 113 persons to the acre.

† Calcutta Directory, 1867.

‡ I have sent for a copy to Calcutta, and if received in time, will, of course, give effect to any corrections of the above, which may be necessary.

Europeans, Americans, Eurasians, Greeks, Armenians, and native converts. The following is the result:—

Christians	5·19
Hindoos	6·41
Mussulmans	5·83
Jews	1·46
Chinese	3·19
Parsees	0·88

The average calculated on a population of 430,000 being at the rate of 5·408 per cent. per annum. The very limited number of Jews, Chinese, and Parsees under observation, renders the above results, as to these classes, valueless for all purposes of comparison. [42]

Confining the enquiry for a moment to Hindoos and Mussulmans, and comparing the above figures with those in Colonel Sykes' paper, founded on the Calcutta census for 1837 referred to above, we have the following:—

Nationality.	Sykes.	Justices.
Hindoos	5·71	6·41
Mussulmans	3·47	5·83

Colonel Sykes' figures being deduced from the annual average deaths for eleven years prior to the census in 1837, the results of the census at that date being taken as a fixed element in the calculation without reference to the annual movement in the population.* I am quite unable to explain the apparent excess in mortality for the year 1865 as compared with that which appeared to prevail prior to 1837, and fear that the results in this respect cannot be relied on. It is curious that both authorities agree in assigning a considerably higher death rate to Hindoos than to Mahommedans. This is in accordance with experience and observation. The Hindoo is practically a

* Statis. Journal, vol. viii., p. 52.

vegetarian, while the Mussulman partakes freely of all kinds of animal food excepting pork. The latter has accordingly more stamina to resist the effects of epidemics such as fever, cholera, or small pox, which carry off the mere rice eaters in large numbers. [43]

The mortality amongst the European Officers of the Civil and Military Services of India has been determined with the greatest precision. The names of Samuel Brown, Dr. W. Farr, Charles Jellicoe, also of Mr. Davies, Mr. Neison, and others, will at once occur to many of my hearers in connexion with this department of vital statistics. The most recent paper on the subject is that by Mr. Samuel Brown which is published in the April, 1863, number of the Assurance Magazine.

The only paper, so far as I am aware, which treats of mixed European lives resident in India, is one by Mr. C. S. Francis which embraced the experience of the Oriental and Laudable Insurance Companies of Calcutta from 1815 to 1847. The mortality of Eurasians is treated in a paper by the writer, which is published in the journal of the Statistical Society for September, 1864.[44]

The Health Officer of Calcutta furnished the Census Committee with a Table of Mortality amongst the Europeans resident in Calcutta during 1865,* from which it appears that there were 304 deaths amongst an aggregate population of 11,224, the Mortality being thus at the rate of 2·71 per cent. Turning to Dr. Farr's "English Life Table," the average annual rate of mortality in England and Wales during the 17 years 1838-54, is given at 2.245 per cent.,† a result little below that which appears, from the above figures, to prevail in Calcutta amongst the European population. Very much doubt, however, exists as to whether all the above 11,224 persons could have been under observation for a whole year. For instance, there

* I am not certain as to the period embraced, but will give effect to any correction on receiving the Health Officer's Report.

† English Life Table. Introduction, p. xx.

were 2,068 Europeans enumerated as being on board ships on the river on the night of the census. Now, the census was taken in January, when it is well known all the East Indiamen, which sail to England round the Cape, are lying in the river. These generally arrive towards the end of the year, and take their departure again early in the next year. I have no materials by me which will enable me to approximate to the number of European seamen on the river in July as compared with January, but think that the above figures may be reduced at least one-half. It is to be observed that Europeans, especially of the better class, seldom remain to die in Calcutta. Medical men generally order patients on a sea voyage or to some more genial climate while there is yet time. These considerations induced me to accept the quotation of 2.71 per cent., as indicating the annual rate of mortality amongst Europeans in Calcutta, with some reserve.

On the other hand that which materially swells the aggregate of European mortality in Calcutta, is the death-rate prevailing amongst common soldiers and sailors. The latter come off a long voyage go ashore into Lall Bazaar and other places of resort, drink arrack and similar vile compounds to excess, stagger out and sleep all night perhaps in the open air, the result being nearly certain death. I have met them on riding out at dawn in Calcutta staggering about on the maidaun after the night's debauch, and even then declaring themselves "ready to drink anything."[45]

The mortality in the native quarter of the town, as might be expected, exceeds that in the European quarter. Calcutta, in accordance with "Section 94 of Act VI. of 1863, B. C.," is divided into six districts,* the western boundary extending to low water mark of the west side of the River Hooghly, lying between Chitpore bridge on the north, and the south-west corner of Tolly's Nullah on the south.

* Ante par. 40.

A line drawn from near the Custom House to the eastern extremity of the Boitacannah Road separates the 1st, 2nd, and 3rd, or northern division of the town, from the 4th and 5th, or southern division. The latter comprehends the European quarter of Calcutta, and is much less densely populated than the native quarter of the town.[46]

The following table exhibits, in square feet, the gross and net area of each division, the average space occupied by buildings, and the mean space allowed to each person.*[47]

Districts.	Divisions.	Gross Area.	Net area.	Average space occupied by Buildings.	Mean space allowed to each person.
		Sq. Miles.	Sq. Miles.		
First, Second, Third	Northern or Native	1·044 1·359 1·080	0·869 1·132 0·875	207 yards and 6 feet	14 yds. 5 ft. 11 yds. 6 ft. 10 yds. 6 ft.
Fourth, Fifth	Southern or European	0·883 1·257	0·696 0·979	324 yards and 2 feet	19 yds. 1 ft. 26 yds. 7 ft.

The following table exhibits the mortality during the year in each of the above divisions as compared with the population.[48]

Division.	Population.	Mortality.	
		Gross.	Per cent.
Northern	241,790	16,767	6·93
Southern	113,084	5,953	5·26

The subjoined extract from the Report† tends further to explain the excess of mortality in the northern division of the city:—"If in this calculation, be taken into consideration the daily influx of people coming to transact business, and of the space required for animals kept within, it is evident that such mean space must be still less. Moreover it is in these divisions that the largest amount of street traffic exists, which must

* Report, pp. 16, 17; Indian quantities converted into square feet.

† Report, p. 28.

necessarily cause a corresponding increase of sweepings, &c., which have daily to be removed by the Conservancy Department. In fact, this is, in some measure corroborated by the Health Officer's Report, according to which the removal of sewage matter from the drains during the past year amounted to 1,386,238 cubic feet, which is more than one-half of the total excavations removed from the whole of the town. Yet singularly enough, it is precisely in these divisions that the average breadth of public thoroughfares is the smallest, so that in fact, the obstruction caused by the daily traffic is greatest just where ample space is most needed. It is likewise in these divisions that by far the greatest number of jute screws, dye shops, oil presses, and soap manufactories are situated, so that a most dangerous and offensive trade is carried on in localities, several parts of which are hardly accessible to fire engines, and in which up to College Street, there is not one single public tank. It is not a less remarkable fact, that although in these divisions the number of private tanks is the largest, the majority of them are little better than stagnant ponds, carrying in them the germs of disease. And finally, the largest number of establishments licensed to retail spirituous liquors and intoxicating drugs, are located in these very divisions, so that all elements calculated to affect the health of the residents are concentrated in the divisions in which the heaviest mortality occurred "[49]

It may be interesting to subjoin the mortality per cent. per annum amongst various classes in India according to different authorities, as compared with the mortality amongst the population of England and Wales, viz.—

Bengal Civil Service ...	...	1790 to 1842 (Neison)	2·18
Bengal Military ...	...	1800 to 1847 (Neison*)	2·40
Madras do. ...	...	1808 to 1840 (Davies)	3·28
Do. do. ...	...	1808 to 1857 (Brown)	3·11

* Excluding retired.

European Soldiers *	... 1809 to 1856	(Farr)	6·86
Eurasians	... 1837 to 1851	(Tait)	2·47
Population of Calcutta	... 1866	(Justices)	2·71
England and Wales	... 1854 to 1863	(Farr)	2·21

It is to be observed that in any comparison of European mortality in India, an essential element is the period of time embraced in the observations. Thus the death rate during the first quarter, or even half, of the present century, is no just criterion for future guidance. A great change for the better has taken place within the last few years, and Englishmen may now settle in India with much less cause for apprehension than prior to the era of railways and the establishment of the overland route. [50]

The materials from whence to derive the rates of Indian mortality are exceedingly meagre. To Colonel Sykes we are principally indebted for contributions drawn from the domain of Indian Vital Statistics. The following table, exhibiting the death rate per cent. from 1858 to 1865, both inclusive, amongst the native troops employed in each Presidency of India, as well as the average for the whole of British India, is taken from the Blue Book.

* Non-Commissioned Officers and men, vide "Report on the Sanitary State of the Army in India," p. 158.

SICKNESS AND MORTALITY AMONGST NATIVE TROOPS IN INDIA.

YEAR.	AVERAGE STRENGTH.				DEATHS.												INVALIDED.*			
					Bengal.			Madras.			Bombay.			British India.						
	Bengal.	Madras.	Bombay.	British India.	From Ordinary Causes.	From Cholera.	Total.	From Ordinary Causes.	From Cholera	Total.	From Ordinary Causes.	From Cholera.	Total.	From Ordinary Causes	From Cholera.	Total.	Bengal.	Madras.	Bombay.	British India.
1858	80,268	40,900	40,062	168,230	1,306	206	1,512	897	178	1,075	517	82	599	2,720	466	3,186	154	966	1,769	..
1859	95,336	57,682	40,818	203,836	1,024	145	1,169	781	227	1,008	373	111	484	2,178	483	2,661	288	1,285		..
1860	62,898	60,684	37,642	161,224	847	330	1,177	787	260	1,047	283	88	371	1,917	678	2,595	592	3,229	Not Stated	..
1861	42,544	40,315	31,031	113,890	627	177	804	366	68	434	207	44	251	1,200	289	1,489	1,897	2,033	2,631	6,561
1862	38,519	33,551	28,961	101,031	521	115	636	238	83	321	209	90	299	968	288	1,256	1,298	4,302	1,264	6,864
1863	39,310	32,889	26,419	97,612	622	57	679	260	87	347	203	37	240	1,085	181	1,266	543	1,026	1,279	2,848
1864	40,531	29,708	24,912	95,151	409	73	482	265	116	381	250	139	389	924	328	1,252	734	Not Stated	976	..
1865	39,891	29,766	24,729	94,386	905	193	1,098	262	135	397	245	126	371	1,412	454	1,866	680	413	1,015	2,108

The Native Indian Army being recruited from various nationalities, neither the preceding table, nor the materials from whence it is derived, afford any clue to the mortality which prevails amongst the different races composing the Army. Hence no comparison can be instituted between the mortality indicated by the preceding table, and that prevailing in Calcutta, amongst the Hindoo and Mahommedan population, as appears from the census report.[51]

HEALTH OFFICER'S REPORTS.

Since the above was written, I have received from Calcutta, the Reports for 1865 and 1866, of Dr. C. Fabre Tonnerre, the health officer of Calcutta, referred to, ante par. 40.[52]

It may be premised that 1865 and '66 were altogether exceptional years. During the first six months of 1865, an epidemic of small-pox prevailed, and the sudden rise in the price of articles of food and clothing, weighed heavily on the poorest classes. In 1866, the famine prevailing in Bengal caused an influx of starving population into Calcutta, estimated at upwards of 20,000 souls. Of the 20,283 who died during that year, 5,284 were paupers brought to the ghats for cremation at the public expense, of whom 2,103 were found dead in the streets, by the police. Thus, it appears from the Returns that upwards of one-fifth of the total deaths in 1865 were from small-pox; and upwards of one-third of the total deaths in 1866 were from cholera.[53]

The abstracts of the Health Officer are arranged according to the classification adopted by the Registrar General of England, and the following table exhibits the total mortality from all causes, on the assumed fixed and floating population of the town :— [54]

Year.	Estimated Population.	Deaths.	Mortality per cent.
1865	430,000	23,233	5.408
1866	430,000	20,283	4.716

The mortality per cent. amongst the 377,924 persons constituting the total resident population within the ditch,* according to the census, arranged according to creeds, but excluding Jews, Chinese, and Parsees,—the numbers applicable to which classes or nationalities being too small to admit of safe conclusions,—was as follows:—

Year.	Christians.	Hindoos.	Mahommedans.
1865	5·19	6·41	5·83
1866	4·40	5·47	5·41

There being included under Christians, I apprehend, Europeans, Americans, Eurasians, Greeks, Armenians, and Native Converts: (ante par. 42.)[55]

And the proportion per cent. which the mortality, from different causes—according to the classification adopted in this country—bears to the total casualties, was as follows*:—[56]

Year.	Classes.					Causes not Specified.
	I.	II.	III.	IV.	V.	
	Zymotic Diseases.	Constitutional Diseases.	Local Diseases.	Developmental Diseases.	Violent Deaths.	
1865	81·496	3·017	8·402	3·934	1·033	1·692
1866	81·294	2·352	9·067	5·551	1·000	0·750

Under "Zymotic diseases" are included Dysentery, Cholera, Fever and Small-pox.

Under "Constitutional diseases" are included Dropsy, Cancer and Gangrene, which three caused the most deaths under that class.

Under "Local diseases," we find Convulsions, Trismus, Spleen diseases, Tetanus, causing the greatest mortality.

And under "Developmental diseases," the largest figures are opposite Cyanosis, Still-born, and "Not Specified."[57]

But the most remarkable fact revealed by the Health

* That is within the municipal boundaries of the town.

Officer's Reports is, that during the two years under observation, upwards of 80 per cent., or four-fifths of the total deaths in Calcutta were caused by diseases of the zymotic class, and these belong almost entirely to the miasmatic order. The following table exhibits the ratio per cent. which the deaths from the six principal diseases of the miasmatic order, bear to the total casualties during the years under review.[58]

Name of Disease.	Year.	
	1865.	1866.
Diarrhœa	4·231	6·172
Dysentery	10·378	12·611
Cholera	21·816	33·654
Small-pox	21·992	0·406
Fever	17·672	19·984
Remittent Fever	5·272	5·993

It is curious to observe from the above table, that small pox, which caused about 22 per cent. of the total casualties in 1865, did not cause one-half per cent. of the total casualties in 1866. We gather from the reports, that the deaths from this cause were chiefly in the second and third, or northern divisions of the town, inhabited mostly by natives, the minimum mortality being in the sixth division inhabited almost wholly by Europeans; also that the scourge was most virulent in March, April and May. As to cholera during 1866, the maximum mortality was also in the native part of the town, the minimum being in the European quarter, and the most fatal months were March and April.[59]

The following table exhibits the ratio of deaths to the total population amongst the three classes above distinguished:—

Disease.	Christians.	Hindoos.	Mahommedans.
Diarrhœa	0·013	0·170	0·106
Dysentery	0·022	0·433	0·136
Cholera...	0·069	1·075	0·440
Small-pox	0·001	0·009	0·014
Fever	0·029	0·568	0·345
Remittent Fever ...	0·005	0·204	0·073

The table is read thus:—Of the total population, there died of cholera in 1866—

Christians ... 0·069 per cent.
Hindoos ... 1·075 do.
Mahommedans... 0·440 do.[60]

The following table exhibits the ratio of deaths according to religion or caste:—

Disease.	Christians.	Hindoos.	Mahommedans.
Diarrhœa	0·221	0·308	0·405
Dysentery	0·389	0·784	0·519
Cholera...	1·261	1·929	1·680
Small-pox	0·004	0·012	0·045
Fever	0·519	1·018	1·313
Remittent Fever ...	0·053	0·369	0.280

That is to say, that the casualties from cholera during the year, amounted to

Christians ... 1·261 per cent. of their number.
Hindoos ... ... 1·929 do. do.
Mahommedans 1·680 do. do.[61]

And the following table exhibits the ratio of deaths to the total casualties:—

Diseases.	Christians.	Hindoos.	Mahommedans.
Diarrhœa	0·267	3·643	2·257
Dysentery	0·470	9·235	2·896
Cholera	1·516	22·754	9·369
Small-pox	0·005	0·145	0·256
Fever	0·627	12·007	7·321
Remittent Fever ...	0·064	4·348	1·556

It thus appears that during the year under review upwards of one-third of the total casualties were from cholera in the following proportion, viz.:—

Christians ... 1·516 per cent.
Hindoos ... 22·754 do.
Mahommedans 9·369 do.[62]

The following is a summary of the three preceding tables and exhibits at one glance the ratio of deaths from the above mentioned six principal diseases of the miasmatic order during 1866:—

Ratio of Deaths.	Christians.	Hindoos.	Mahommedans.
(1.) To the total population ...	0·139	2·459	1·114
(2.) According to religion or caste	2·447	4·420	4·242
(3.) To total casualties	2·949	52·132	23·655

Thus the deaths amongst Christians were about 24½ for every 1,000 of their number, amongst Hindoos 44⅛ for every 1,000 of their number, and Mahommedans 42⅔ for every 1,000 of their number. [63]

These figures speak for themselves and are most extraordinary. It is impossible to avoid the conclusion that the excessive mortality of Calcutta is due in no small degree to causes which are preventible. To defective drainage, impure water, absence of ventilation, and the unclean habits of the native community. The health officer complains over and over again in his reports of the extraordinary difficulties encountered in enforcing sanatary regulations, more especially amongst the lower class of natives. The nuisances, he says, are the result of habits transmitted from generation to generation, and favored by caste prejudices. As to the Inspector of Nuisances, the name of that officer does not appear from the Reports, but his post must be no sinecure. I should not like to be inspector of nuisances for the town of Calcutta. It appears that in 1865 he was compelled to institute 1,254 suits against mehters, and no less than 4,070 prosecutions against other persons, for offences against the sanitary regulations. Nor are strikes unknown even in Bengal. During 1866, the mehters of Calcutta struck work, and for many days none of these functionaries were visible in the European quarter of the town.[64]

In the returns before us neither the age at death, nor the trade or occupation of the deceased is given; but the sexes are

distinguished. Having in recollection the abnormal disparity of the sexes revealed by the Census of 1866 (ante par 30) and the consequent doubt which is thrown over that portion of the the returns, I have not deemed it necessary to go closely into this particular point. The following table distinguishes the mortality of the sexes from the above six principal diseases of the miasmatic order. The figures have reference to the ratio of deaths according to religion or caste. [65]

Disease.	Christians.		Hindoos.		Mahommedans.	
	Males.	Females.	Males.	Females.	Males.	Females.
Diarrhœa ...	0·187	0·270	0·245	0·399	0.358	0·501
Dysentery ...	0·395	0·380	0·726	0·864	0·461	0·636
Cholera ...	1·759	0·540	2·282	1·426	1·835	1·364
Small-pox ...	—	0·010	0·011	0·014	0·049	0·039
Fever	0·485	0·570	1·030	1·002	1·163	1·615
Remittent Fever	0·062	0·040	0·419	0·297	0·275	0·287
Totals	2·888	1·810	4·713	4·002	4·141	4·442

The general result indicates a lower rate of mortality amongst Christian and Hindoo females than males, but a somewhat higher rate amongst Mahommedan females as compared with males. Then, in the case of cholera, the deaths amongst Christian females are less than one-third of the deaths of the males from that cause; the mortality amongst Hindoo and Mahommedan females, from cholera, being also considerably lower in proportion than amongst the males. On the other hand diarrhœa and dysentery appear in a very marked degree more fatal to females than males, and fever also, though in a somewhat lesser degree.[66]

VI.—METEOROLOGY.

The following table exhibits an Abstract of the Health Officer's Meteorological Report for 1866, and may be interesting.

CALCUTTA METEOROLOGICAL REPORT FOR 1866.

(CONDENSED.)

Month.	READING OF THE BAROMETER.						TEMPERATURE OF THE AIR.									RAINFALL.				
	Mean height in Inches.	Increase of Reading.					Mean during the month.	Highest day.			Lowest night.			Entire Range during the month.	Difference between mean dew point temperature and air temperature.	Degree of humidity complete saturation being represented by unity.	Number of days on which rain fell.	Amount of fall in inches.	Maximum fall during 24 hours.	Prevailing Winds.	Month.
		From.			To.			Reading.	Day.	Hour.	Reading.	Day.	Hour.								
		Inches.	Day.	Hour.	Inches.	Day.	Hour.														
Jan.	30·041	29·848	6		30·221	8		78·2	84·7	27	10a.m.	58·8	8	6a.m.	16·8	10·1	0·72	5	1·70	0·80	NW. and S.	Jan.
Feb.	29·956	29·736	28		30·138	7		79·2	91·4	28	3p.m.	56·2	14	7a.m.	35·2	11·13	0·69	6	3·74	1·56	E. & N. & W.	Feb.
Mar.	9·811	29·619	22		30·060	12		94·3	98·5	22	4p.m.	71·4	6	7a.m.	27·2	15·0	0·62	Nil.	Nil.	Nil.	S. and W. and SW.	Mar.
April	29·779	29·545	11		30·074	22		94	102·6	10 &15	4p.m.	68·4	22	1 & 8 a m.	34·2	12·2	0 68	9	1·81	1·16	S. and SSW.	April
May	29·646	29·476	29		29·900	1		96·1	105·8	27	3p.m.	71·7	3	5a.m.	34·1	10·1	0·73	9	2·56	0·88	S. and SSW.	May
June	29·518	29·319	21	4p.m.	29·682	2	10a.m.	92·8	101·6	8	1p.m.	76·2	10	7p.m.	25·4	8·5	0·76	21	7·02	2·41	S. and SSW. and W.	June
July	29·587	29·433	9	3p.m.	29·714	14	10a.m.	88	93·2	9	3p.m.	74·4	30	5a.m.	18·8	5·1	0·85	26	13·42	3·43	S. and SSE. and SE.	July
Aug.	29·584	29·322	7	4p.m.	29·822	30	10a.m.	87·6	91·8	31	5p.m.	77·4	28	5p.m.	14·4	4·6	0·86	27	11·48	3·14	SSE. and SE.	Aug.
Sep.	29·666	29·444	9	3p m.	29·855	23	10a.m.	89·3	93·2	1 & 29	3p.m.	77·7	26	5a.m.	15·5	5·6	0·84	23	15·97	3·84	SSE. and S.	Sep.
Oct.	29·838	29·514	25	4p.m.	30·004	28	10p.m.	86·9	91·1	2 & 5		70·8	26		20·3	7·0	0·80	12	7·83	2·00	NW. and NE.	Oct.
Nov.	29 988	29·786	10	3 p.m	30·163	17	9a.m.	82·7	87·1	3 & 4		61·5	28		25·6	11·2	0·70	Nil.	Nil.	Nil.	NNW. & N.	Nov.
Dec	30·079	29·890	20	4p.m.	30·273	20	10a.m	76·4	80·8	1		54·6	30		26·2	11·5	0·68	Nil.	Nil.	Nil.	N. & NNW. and NW.	Dec.

It will be observed that the highest day temperature was on the 27th May, at 3 p.m., when the thermometer stood at 105·8 exposed in shade. March was the most unhealthy month in the year; the mortality, which on account of the change of the monsoon is usually great, rose during that month to its maximum, the Hindoo population being the principal sufferers. The lowest point touched by the thermometer was on the 30th December, when it fell to 54°. There was no rain in March, November, and December; while in September, 16 inches fell, nearly 4 inches having fallen in one day.[67]

VII.—CONCLUSION.

Although the returns now under review are by far the most complete which have ever been received from Calcutta on this subject, there is still much room for improvement. We want more particularly—

A classification of the population according to age, sex, and condition;

A more careful registration of the births;

A return of the marriages;

A return of deaths exhibiting, in addition to the particulars now furnished, the age and condition of the deceased;

Returns indicating the extent to which the population is affected by emigration.

The reports should be, as near as possible, in the form adopted by the Registrar General of this country. Meanwhile, it is necessary to exercise a certain reserve in generalizing from the figures which form the bases of this paper.[68]

But of one great fact there is abundant evidence—that, while the mortality of London, for instance, is about $2\frac{1}{10}$th per cent., the mortality of Calcutta is 5 per cent., or considerably more than double; and that in the latter case it might be reduced, in all probability, one-half or one-third by improvements in the sanitary condition of the city, and even moderate attention to the fundamental laws of hygiene.[69]

It is most gratifying to be able to announce that a number of sanitary reforms have recently been completely effected, or are now in process of consummation. For instance, the custom of throwing dead bodies into the river is entirely stopped. Bodies of paupers are now burnt at the public expense, the Hindoo community having subscribed largely to render the burning ghats innocuous. Then, most vigorous and comprehensive measures are now in progress for improving the ventilation, flooring, and drainage of the native bazaars, and a careful supervision is being exercised on the sale of articles of food and drink. The grog shops are regularly visited, and licenses forfeited where it is found that deleterious compounds are being sold to European sailors visiting the port. In the drainage department of the municipality, extraordinary activity was displayed during the years under review; about half a million sterling has been raised, chiefly for drainage works, and ere long Calcutta ought to be able to boast a most complete and effective system of drainage. It is proposed to convey the sewage by a railway, constructed at a cost of £55,000, to the Salt Water Lake—a lagune situate a few miles south-east of Calcutta—there to be utilized for agricultural purposes. Then as to water—a contract has been concluded with Messrs. Brassey, of London, to raise six millions of gallons of water daily at Phulta, a point on the Hooghly about sixteen miles above Calcutta, there to be filtrated and afterwards conveyed by covered aqueducts to Calcutta, and distributed over the town. The works, which are to cost upwards of half a million

sterling, are now being actively pushed forward, and it is believed will be completed by 1870.[70]

We shall look forward with much interest and curiosity to future reports of the Health Officer of Calcutta. That great metropolis—the entrepôt for the produce of Bengal, one of the richest provinces in the world—must, I imagine, remain the capital of British India and chief commercial emporium of Asia. To the Englishman who looks to India as a field where disappointment may find retreat, or enterprize have room to expand, it must be interesting to know that in a few years there is reason to hope he will be able, with due precaution, to prosecute his vocation in Calcutta without much greater risk to life than is experienced in this country.[71]

It is impossible to conclude this paper—which, indeed, pretends to little more than an analysis and re-arrangement of the information contained in the Reports—without bearing testimony to the energy and ability exhibited by the Committee of the Justices, in making all the necessary arrangements for the census, in completing the operation, and finally, in elaborating the materials so as to present them in an intelligible form to the public. To the Vice-Chairman of the Justices, more particularly, especial credit is due; for he, it would appear, undertook all the practical details of the census, and prepared the report which bears his signature. That report has, I believe, been severely criticised by the Calcutta press; but those only who have lived in India, and made a similar effort, can realize the extraordinary difficulties to be encountered, in any operation of the kind, in that Dependency.[72]

As an instance of the ignorance and prejudice which prevails, it may be mentioned that notwithstanding one of the Census Committee, a Mahommedan gentlemen of rank, prepared a pamphlet on the subject of the census, which after being translated by him into several languages, he actually caused to be printed and circulated amongst the natives at his own expense, with a view to general enlightenment on

the objects and utility of the census.—no less than 198 native families deserted their homes and fled into the jungle on the night of the census, rather than remain to be enumerated, the impression being, that either some wholesale raid on the female population of their locality was contemplated, or that the Government were collecting materials for an assessment of taxes on a more comprehensive scale. Great credit, nevertheless, is due to the Moulvie for his exertions in diffusing information on the subject. Having in recollection the proverbial indolence and apathy of the wealthier natives of India, and the traditional antipathies existing between the worshippers of Islam and us Christians of the West, it appears to me a very curious sign of the times, that a Mahommedan gentleman of India should so fully appreciate the scientific importance and value of a census of Calcutta as to render aid, at once most useful and disinterested, in completing that operation.[73]

Who would dare to place limits to the prosperity of our Indian Empire if Christians, Mahommedans, and Hindoos, ignoring all differences of creeds and religions, and adopting one common platform in the interest of progress, would apply themselves loyally to the improvement of the social condition of the teeming millions of India, and the development of her natural resources?[74]

For some mighty and beneficent purpose Providence has placed the destinies of two hundred millions of human beings, inhabiting that remote district of Asia, in the hands of a few Anglo-Saxon Christians. Be it our ambition to discharge that high trust in a manner worthy of a christian people, and on all occasions to welcome and encourage in every department of the state, such useful and disinterested co-operation, whether of Hindoo or Islamite, as was rendered in taking the census of Calcutta in 1866, by the Mahommedan Moulvie Abdool Lateef Khan.[75]

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